

RANGE EXTENSION FOR THE BUTTERFLY *TAGIADES JAPETUS JANETTA* BUTLER (LEPIDOPTERA: HESPERIIDAE) IN QUEENSLAND

K.L. DUNN¹ and R.G. EASTWOOD²

¹ Plant Research Institute, Burnley, Vic., 3121

² P.O.Box 325, Maroochydore, Qld, 4558

Abstract

The known distribution of *Tagiades japetus janetta* is extended to Mary River Heads, Queensland and the possibility of further range extension is considered.

Introduction

The black and white flat *Tagiades japetus janetta*, is common from Torres Strait to Paluma, northern Queensland (Common and Waterhouse, 1981). J.F.R. Kerr suggested that this species may have extended its range in recent years (Common and Waterhouse, 1972). Collecting since 1972 appears to support Kerr's suggestion and a chronological list of published records suggests that the species range has been extending in Australia since the earliest record in 1889.

History of records

The following repository abbreviations are used: (ANIC), Australian National Insect Collection, Canberra; (JCUC), James Cook University Collection, Townsville; (MV), Museum of Victoria, Melbourne; (QM), Queensland Museum, Brisbane; (UQIC), University of Queensland Insect Collection, Brisbane.

Major published distribution in chronological order:

1889 - Cape York, northern Queensland (Miskin, 1889).

1914 - Cape York to Claudie River (Waterhouse and Lyell, 1914).

1964 - Cape York to Tully (Common, 1964).

1972 - Cape York to Paluma (Common and Waterhouse, 1972).

1981 - Cape York to Shute Harbour (Common and Waterhouse, 1981).

1988 - Cape York to Yeppoon (Valentine, 1988).

Significant specimen records since 1950 (see also Fig. 1):

Jan 1955 - Cairns Intake (JCUC).

Apr 1961 - Waterview Creek near Paluma (ANIC).

Aug 1976 - Airlie Beach near Shute Harbour (ANIC).

Dec 1979 - Byfield (UQIC).

Apr 1980 - Jim Crow Mountain (Valentine and Johnson, 1982).

Apr 1982 - Miriam Vale collected by E. Johansen (in QM, G.B. Monteith pers. comm.).

Apr 1989 - Two adults observed by R. Eastwood and a specimen since taken by P.J. Fox on 7 Nov 1989 at Mary River Heads near Maryborough.

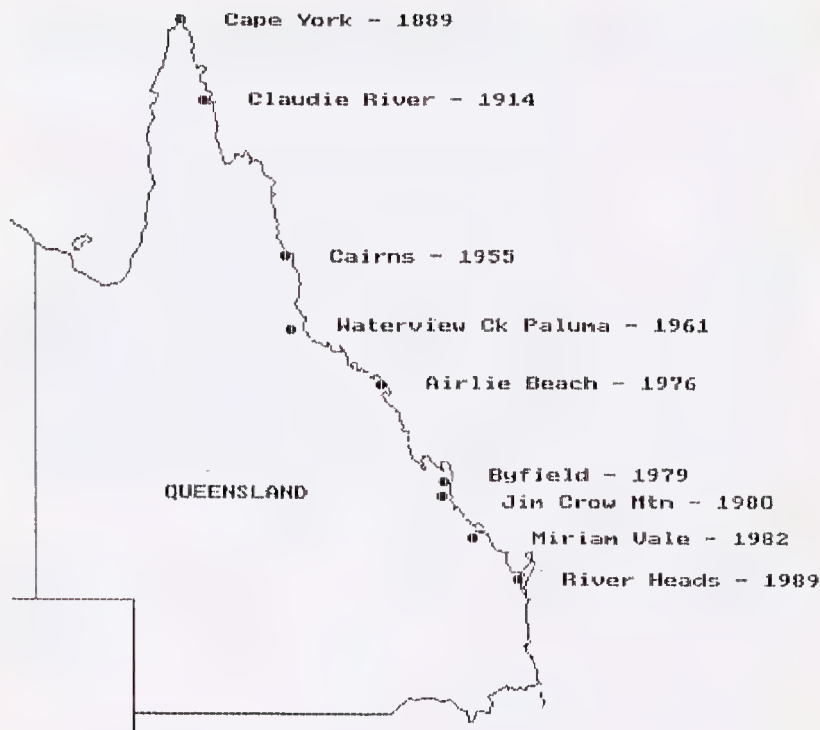


Fig. 1. Range extension of *Tagiades japedus janeta* based on earliest available records.

Discussion

T. japedus was not encountered in the Cairns district by F.P. Dodd who resided at Kuranda between 1904 and 1937, nor by A.N. Burns when he lived at Meringa between 1925 and 1930, nor by M.J. Manski who also lived in the district between 1926 and 1940. The earliest record from the Cairns region appears to be that from the Cairns Intake (Crystal Cascades) collected in January 1955 by E.J. Harris. Further specimens were collected during 1956 by both Harris and C.W. Frazier at a number of adjacent localities.

Wood (1985) described the life history and recorded the larval food plant as *Dioscorea transversa* (R. Brown) (Dioscoreaceae). This plant occurs along the coast in the Northern Territory and the Kimberley region of northern Western Australia and continuously from Cape York to Paluma district, Queensland. Between Paluma and Rockhampton the distribution is sporadic, but south of Rockhampton

it occurs continuously to Stanwell Park, New South Wales (Telford, 1986).

Since *T. japetus* has bridged the dry belt regions in central Queensland, there now exists the possibility of range extension along the central coast of New South Wales. A possible host plant shift to the widespread *D. transversa* from one of the more restricted *Dioscorea* species at Cape York or Torres Strait islands could easily explain the apparent invasion of this species in coastal Queensland this century. Other *Dioscorea* species must be utilised in Torres Strait as according to Telford (1986), *D. transversa* is not known from these islands and *T. japetus* has been known from Torres Strait (specimens in MV) since H. Elgner's intensive collecting at the turn of the century.

Acknowledgements

Thanks are due to G. Daniels, P.J. Fox, C. Muller and G.B. Monteith for their contributions; E.D. Edwards and M. Malipatil for helpful comments; and the curators of ANIC, JCUC and MV for allowing examination of material in collections under their care.

References

- COMMON, I.F.B. 1964. *Australian Butterflies*. 131 pp. Jacaranda Press Brisbane.
- COMMON, I.F.B. and WATERHOUSE, D.F. 1972. *Butterflies of Australia*. 498 pp. Angus and Robertson, Sydney.
- COMMON, I.F.B. and WATERHOUSE, D.F. 1981. *Butterflies of Australia*. 682 pp. Angus and Robertson, Sydney.
- MISKIN, W.H. 1889. Descriptions of some new species of Australian Hesperiidæ. *Proceedings Royal Society Queensland* 6: 146-154.
- TELFORD, I.R.H. 1986. Dioscoreaceae. *Flora of Australia* 46: 196-202.
- VALENTINE, P.S. 1988. *Australian tropical butterflies*. Pp. iii + 71. Tropical Australia Graphics, Queensland.
- VALENTINE, P.S. and JOHNSON, S.J. 1982. New records of Lycaenidae and Hesperiidæ (Lepidoptera) from northern Queensland. *Australian Entomological Magazine* 9: 1-3.
- WATERHOUSE, G.A. and LYELL, G. 1914. *The butterflies of Australia*. 239 pp. Angus and Robertson, Sydney.
- WOOD, G.A. 1985. The life history of *Tagaides japetus janetta* Butler (Lepidoptera: Hesperiidæ: Pyrginae). *Australian Entomological Magazine* 12: 15-16.